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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,454	08/01/2005	Alexander Straub	CS8440/LeA 36,202	7860

34469 7590 10/05/2006

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EXAMINER
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KOSACK, JOSEPH R

ART UNIT	PAPER NUMBER
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1626

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/518,454	Applicant(s) STRAUB, ALEXANDER	
	Examiner Joseph Kosack	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/10/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 11-20 are pending in the instant application.

#### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 11-18 (in part) and 19-20, drawn to a process for preparing compounds of formulae I and II where Het is selected from rings A, B, C, L, and M.

Group II, claim(s) 11-18 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring D.

Group III, claim(s) 11-18 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring E.

Group IV, claim(s) 11-18 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring F.

Group V, claim(s) 11-18 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring G.

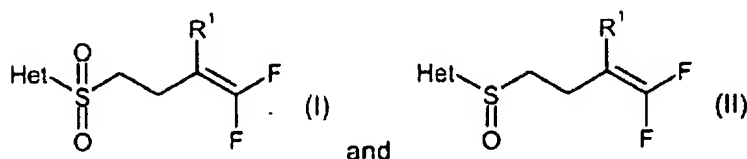
Group VI, claim(s) 11-18 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring N.

Group VII, claim(s) 11-17 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring H.

Group VIII, claim(s) 11-17 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring J.

Group IX, claim(s) 11-17 (in part), drawn to a process for preparing compounds of formulae I and II where Het is ring K.

In accordance with 37 CFR 1.499, Applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted. Again, **this list is not exhausted**, as it would be impossible under the time constraints due to the sheer volume of subject matter instantly claimed. Therefore, Applicant may choose to elect a single invention by identifying another specific embodiment not listed in the exemplary groups of the invention and Examiner will endeavor to group the same. **If Applicant is unable to elect a single invention, Applicant may instead choose to elect a specific compound and Examiner will attempt to group it.** The claims herein lack unity of invention under PCT Rule 13.1 and 13.2 since the compounds defined in the claims lack a significant structural element qualifying as the special technical feature that defines a contribution over the prior art. The compounds claimed contain



,which does not define a

contribution over the prior art (see WO 02/06259 A1). The substituents vary extensively and when taken as a whole result in vastly different compounds. Accordingly, unity of invention is considered to be lacking and restriction of the invention in accordance with the rules of unity of invention is considered proper. Additionally, the vastness of the

claimed subject matter and the complications in understanding the claimed subject matter imposes a burden on any examination of the claimed subject matter.

***Response to Restriction***

During a telephone conversation with Richard E. L. Henderson on September 5, 2006 a provisional election was made **with** traverse to prosecute the invention of Group I, claims 11-18 (in part) and 19-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-18 (in part) withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Priority***

The claim to priority as a 371 filing of PCT/EP03/06511 filed June 20, 2003 which claims priority to DE 10229776.2 filed July 3, 2002 has been acknowledged in the instant application.

***Information Disclosure Statement***

The Information Disclosure Statement filed August 10, 2005 has been considered by the Examiner. It is called to the Applicant's attention that two references are not in compliance with MPEP 609 and have not been considered as no copy has been provided to the office. Applicant is encouraged to provide copies of these references along with a new Information Disclosure Statement citing these references. WIPO publications that were not provided to the office were considered via the WIPO website.

***Claim Objections***

Claims 11-20 are objected to for containing elected and non-elected subject matter. The elected subject matter have been identified supra.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

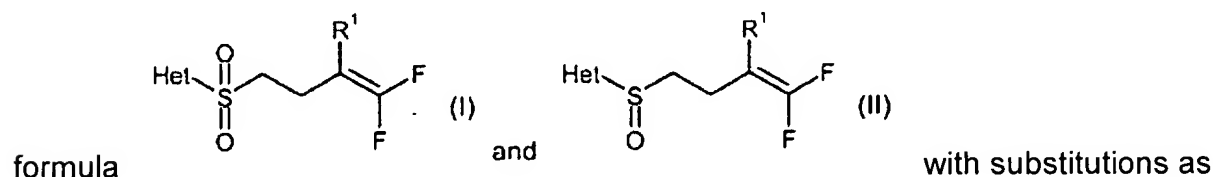
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

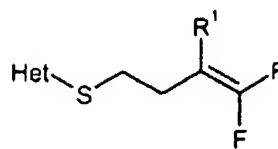
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (WO 01/02378 A1) in view of Patani et al. (*Chem. Rev.* 1996, 3147-3176).

The instant application is drawn to a method of making compounds of the

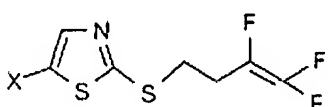


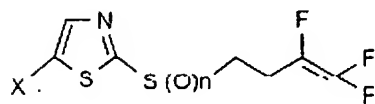


defined by oxidating a compound of the formula: with a salt of peroxomonosulfuric acid.

Determination of the scope and content of the prior art (MPEP §2141.01)

Watanabe et al. teach the oxidation by hydrogen peroxide of a compound of the

formula:  to yield compounds of the formula:



where n is 1 or 2 and m is 3 to 10. See page 1, line 13

through page 2, line 16.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Watanabe et al. do not teach explicitly the oxidation by hydrogenperoxomonosulfate, i.e. potassium peroxymonosulfate and compounds where R<sup>1</sup> of the instant compounds is hydrogen.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

Watanabe et al. teaches that potassium peroxomonosulfate can be used as the oxidizing agent. See page 4, lines 7-11. Patani et al. teach the bioisosteric replacement of hydrogen for fluorine. See pages 3149-3150.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to follow the synthetic scheme of Watanabe et al.

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and substitute fluorine for hydrogen in the alkene group according to Patani et al. and use potassiumperoxomonosulfate as suggested by Watanabe et al. to make the claimed invention with a reasonable expectation of success. The motivation to do so is provided by Watanabe et al. Watanabe et al. teach the use of the synthesized compounds as nematicides. See the abstract.

Thus, the claimed invention as a whole was *prima facie* obviousness over the combined teachings of the prior art.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

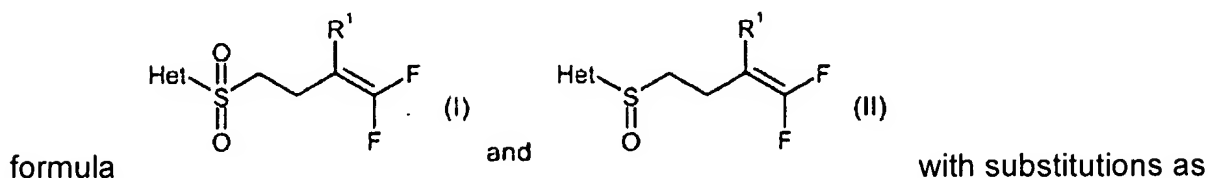
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

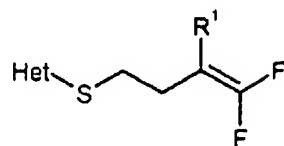
Claims 11-20 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent No. 6,734,198 in view of Patani et al. (*Chem. Rev.* 1996, 3147-3176).



The instant application is drawn to a method of making compounds of the



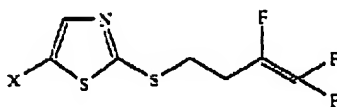
defined by oxidating a compound of the formula:



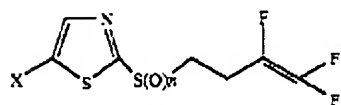
with a salt of

peroxomonosulfuric acid.

'198 teaches the oxidation of



to yield



where n is 1 or 2 and X is a halogen.

'198 does not teach the process where R<sup>1</sup> of the instant compounds would be hydrogen.

Patani et al. teach the bioisosteric replacement of hydrogen for fluorine. See pages 3149-3150.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to follow the synthetic scheme of '198 and substitute fluorine for hydrogen in the alkene group according to Patani et al. to make the claimed invention with a reasonable expectation of success. The motivation to do so is provided by '198. '198 teach the use of the synthesized compounds as nematocides. See the abstract.

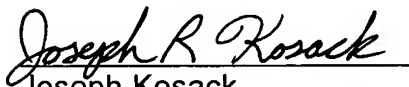
**Conclusion**


Claims 11-20 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Kosack whose telephone number is (571)-272-5575. The examiner can normally be reached on M-F 5:30 A.M. until 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph Kosack  
Patent Examiner  
Art Unit 1626

  
Joseph K. McKane  
Supervisory Patent Examiner  
Art Unit 1626